

Title (en)

CIRCUIT FOR REDUCTION OF CROSS MODULATION AND INCREASED BATTERY LIFE IN A BATTERY POWERED TRANSCEIVER

Title (de)

SCHALTUNG ZUR VERRINGERUNG DER KREUZMODULATION UND ZUR VERLÄNGERUNG DER BATTERIELEBENSDAUER IN EINEM BATTERIEBETRIEBENEN SENDEEMPFÄNGER

Title (fr)

CIRCUIT DE REDUCTION DE TRANSMODULATION ET D'ACCROISSEMENT DE LA DUREE D'UNE BATTERIE DANS UN EMETTEUR-RECEPTEUR ALIMENTÉ PAR BATTERIE

Publication

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Application

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Abstract (en)

[origin: WO9956401A1] A battery powered transceiver including a circuit (52) for increasing the bias current of a low noise amplifier (LNA) (50), in the receiver section of the transceiver, during the time that the transmitter of the transceiver is transmitting, and for reducing the bias current when the transmitter is not transmitting. The increased bias current causes the LNA (50) to operate in a highly linear mode and it is thus less susceptible to cross modulation when transmitting at high power in the presence of a high power "jammer". Since the high bias current level only exists when the transmitter is on (transmitting), current drain on the battery is reduced thus increasing standby time and talk time. In a preferred embodiment, a signal indicative of the state of the transceiver's transmitter causes a switch (Q24) to close only when the transmitter is transmitting, thereby inserting a resistor (R12) in parallel with a biasing resistor (R11) and raising the bias current of the low noise amplifier.

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